

Amendments to the Claims:

Please amend the claims as indicated, with insertions shown by underlining and deletions by strike-through.

Claims 1-94 (Canceled)

Claim 95. (currently amended) An isolated polynucleotide encoding a humanized or chimeric antibody fragment comprising the light chain CDR1 (complementarity determining region one) sequence of the LL2 antibody ~~(CDR) comprising the~~ (amino acids 24 to 40 of SEQ ID NO:2).

Claim 96. (currently amended) An isolated polynucleotide encoding a humanized or chimeric antibody fragment comprising the light chain CDR2 (complementarity determining region two) sequence of the LL2 antibody ~~(CDR) comprising the~~ (amino acids 56 to 62 of SEQ ID NO:2).

Claim 97. (currently amended) An isolated polynucleotide encoding a humanized or chimeric antibody fragment comprising the light chain CDR3 (complementarity determining region three) sequence of the LL2 antibody ~~(CDR) comprising the~~ (amino acid sequence 95 to 102 of SEQ ID NO:2).

Claim 98. (currently amended) An isolated polynucleotide encoding a humanized or chimeric antibody fragment comprising the heavy chain CDR1 (complementarity determining region one) sequence of the LL2 antibody ~~(CDR) comprising the~~ (amino acids 31 to 35 of SEQ ID NO:4).

Claim 99. (currently amended) An isolated polynucleotide encoding a humanized or chimeric antibody fragment comprising the heavy chain CDR2 (complementarity determining region two) sequence of the LL2 antibody ~~(CDR) comprising the~~ (amino acids 50 to 66 of SEQ ID NO:4).

Claim 100. (currently amended) An isolated polynucleotide encoding a humanized or chimeric antibody fragment comprising the heavy chain CDR3 (complementarity determining region three) sequence of the LL2 antibody ~~(CDR) comprising the~~ (amino acid sequence 99 to 105 of SEQ ID NO:4).

Claims 101-104 (canceled)

Claim 105. (currently amended) The isolated polynucleotide of claim ~~113~~ 104, ~~wherein said light and heavy chain variable regions further comprise,~~ further comprising the framework regions (FRs) of ~~a~~ the light and heavy chain variable regions of one or more human antibodies.

Claim 106. (previously pending) The isolated polynucleotide of claim 105, wherein said FRs further comprise at least one amino acid substitution.

Claim 107. (currently amended) The isolated polynucleotide of claim 106, wherein said substituted amino acid in said FRs is an amino acid identified as a potential CDR contact affecting the affinity and specificity of the encoded mAb to the CD22~~an~~ antigen.

Claim 108. (currently amended) The isolated polynucleotide of claim 107, wherein said substituted amino acid is the same amino acid as the corresponding amino acid from a the murine LL2 mAb from which the CDRs ~~were~~are obtained.

Claim 109 (canceled)

Claim 110. (previously pending) The isolated polynucleotide of claim 106,

wherein said FRs of the light chain variable region comprise at least one FR selected from the group consisting of amino acids 1-23 of SEQ ID NO:6, amino acids 41-55 of SEQ ID NO:6, amino acids 63-94 of SEQ ID NO:6 and amino acids 103-113 of SEQ ID NO:6; and

wherein said FRs of the heavy chain variable region comprise at least one FR selected from the group consisting of amino acids 1-30 of SEQ ID NO:8 or SEQ ID NO:9, amino acids 36-49 of SEQ ID NO:8 or SEQ ID NO:9, amino acids 67-98 of SEQ ID NO:8 or SEQ ID NO:9 and amino acids 106-116 of SEQ ID NO:8 or SEQ ID NO:9.

Claims 111-112 (canceled)

Claim 113. (currently amended) An isolated polynucleotide encoding a humanized or chimeric monoclonal antibody (mAb) or an antigen binding fragment thereof comprising:

~~a light chain variable region of a monoclonal antibody (mAb) or antigen binding fragment thereof comprising complementarity determining regions (CDRs) comprising~~

CDR1 (amino acids 24-40 of SEQ ID NO:2), CDR2 (amino acids 56 to 62 of SEQ ID NO:2) and CDR3 (amino acids 95 to 102 of SEQ ID NO:2) of the light chain of the LL2 mAb; and further comprising:

~~a heavy chain variable region of a monoclonal antibody (mAb) or antigen binding fragment thereof comprising complementarity determining regions (CDRs) comprising~~ CDR1 (amino acids 31 to 35 of SEQ ID NO:4), CDR2 (amino acids 50 to 66 of SEQ ID NO:4) and CDR3 (the amino acid sequence 99 to 105 of SEQ ID NO:4) of the heavy chain of the LL2 mAb.

Claim 114 (canceled)

Claim 115. (currently amended) The isolated polynucleotide of claim ~~113-114~~, wherein said fragments are selected from the group consisting of F(ab')₂, Fab', Fab, and Fv.

Claims 116-125 (canceled)

Claim 126. (currently amended) An expression vector comprising the polynucleotide of claim ~~113-104~~.

Claim 127. (currently amended) A mammalian expression ~~host~~ cell comprising the polynucleotide of claim ~~113-104~~.

Claims 128-149 (canceled)